



## Director's Message

It was a privilege to lead Garland Power & Light during our 90th year of providing power to residents and businesses in the City of Garland. Although 2013 brought numerous challenges, we met these head-on and with great success. I'm also proud to say that in spite of limited growth opportunities in our service territory and rising utility operating costs, we honored our commitment to keep electric rates stable and competitive.



This year, we began paying increased Texas Municipal Power Agency (TMPA) demand charges, which cover the City's generation debt obligation for the TMPA Gibbons Creek Power Plant. We managed the higher payments by transferring money from the Rate Mitigation Fund, which was established for this purpose, as well as by earning revenue through our external business endeavors and minimizing costs wherever possible.

With cost management in mind, GP&L successfully led the effort to lower expenses at Gibbons Creek by negotiating favorably priced and structured coal and rail contracts. Recent changes in energy market conditions necessitated restructuring these contracts to provide the flexibility to dispatch the unit in a more economic manner. Since the City has a 47 percent share of the electric output from Gibbons Creek, this was a significant accomplishment in cost reduction.

GP&L's experience and reliability in owning and operating transmission lines allowed us to expand our TMPA transmission services contract to include construction and maintenance. A smooth operational transition was made possible by the diligent efforts of GP&L, TMPA and City of Garland employees.

Throughout the year, and especially during the legislative session, we continued to monitor and analyze market structure proposals and legislation favorable to municipally-owned utilities.

In support of our business strategies, we reorganized several work groups within the utility. The new Energy Services Division consolidated GP&L's competitive functions to improve operations and more effectively meet all of our customers' energy needs. The utility's internal productivity was enhanced by uniting various technology resources into the new Technology Services Division.

Looking to the future, I am confident in our employees' ability to conquer new challenges, and I will work to keep them motivated and rewarded for their efforts. We have many obligations,

but our strategic plans will help us meet or exceed expectations. We will also advance our business by building productive relationships with new external clients and continuing to provide our Garland customers with superior electric service.

Jeff Janke Senior Managing Director



In one of the year's most significant undertakings,
Garland Power & Light signed a transmission operator,
maintenance and construction services agreement
with the Texas Municipal Power Agency (TMPA)
and successfully integrated the increased
responsibilities of the TMPA transmission
system into the utility. Prior to this
agreement, GP&L had been under
contract since 2008 to operate the
Agency's transmission system,
which currently includes
approximately 300 miles of
line and 14 substations.

## New Venture

GP&L's expertise in owning and operating transmission facilities made the utility a logical fit for carrying out the maintenance and construction activities specified in TMPA's five-year capital project plan. GP&L's commitment to maintaining the reliability of the Agency's transmission system and plans to increase efficiencies and reduce costs will benefit Garland and the other Member Cities of Bryan, Denton and Greenville.



Welcome lunch for former TMPA employees

GP&L's exceptional compliance record will also bring value to the Agency: The utility assisted TMPA in a successful transmission audit this year, and will continue to support the Agency in maintaining a clean compliance record.

To help make this new venture a success, nine TMPA employees were transitioned into GP&L, providing valuable knowledge and experience with the transmission facilities. With the possibility of changes at the Agency, this move provides stability and security for these employees.

The integration of the TMPA transmission functions into GP&L was complex and thorough. The information technology, communications, purchasing and administrative needs were successfully assimilated into existing processes. The creation of an additional accounting structure and modifications to the Work Force Management System provide accurate tracking of Agency expenditures, revenues and projects. This data also supports the TMPA operations and maintenance, and capital budgets that GP&L now manages in addition to the utility's own.

Extensive coordination among GP&L, TMPA and the City of Garland allowed the transition of both employees and business operations to be fully executed within three months of the TMPA Board's approval of the contract. Additionally, the integration of TMPA functions into GP&L's system was completed without major disruption of Agency transmission projects.



TMPA transmission facility

GP&L's organizational structure underwent significant changes this year to increase productivity and support the utility's external business strategies. The newly formed Energy Services and Technology Services divisions consolidated functions within GP&L, and the internal reorganization of Transmission & Distribution created more distinction among transmission, distribution and engineering activities.

# Strategies

#### **QSE Power Supply Customers**

- ★ Fayette Electric Cooperative
- ★ City of Georgetown
- ★ Greenville Electric Utility System
- ★ New Braunfels Utilities
- ★ San Bernard Electric Cooperative
- ★ Sharyland Utilities
- $\star$  City of Weatherford

Finding and utilizing alternative sources of revenue was one of the year's foremost endeavors. One significant source was the summertime bilateral sales of GP&L's generation into the energy market. Another income stream that experienced substantial growth is the utility's Qualified Scheduling Entity (QSE), which served a total of seven external clients this year. GP&L effectively met the varying needs of these customers, resulting in an exceptional record of retention for the utility.

GP&L's dedication to creating and maintaining strong relationships with clients was also evidenced by the signing of more contracts this year. Two QSE contracts were extended, a new contract was established to provide service to New Braunfels Utilities, and a contract effective January 2014 was completed with the city of Weatherford. GP&L will also gain revenue by providing transmission operator consulting services for Weatherford.

As GP&L has broadened its customer base, the utility's power obligations have grown. This summer, the combined demand of local citizens and external clients reached a record peak, which GP&L successfully served.

The utility expanded the scope of its business operations through the construction of a transmission switchyard near Nevada, Texas, which will provide power for a crude oil pipeline pumping station and a future substation in the area. Located outside of GP&L's service territory, this switchyard will generate income from transmission service rates.

GP&L also continued marketing carbon credits from the Hinton Landfill Gas Collection System, which brought the utility revenue and sustained the environmentally sound process that decreases methane emissions to reduce landfill odor.



Real time power trader in the QSE control room

Transmission switchyard construction near Nevada, Texas



Power:

GP&L's well-earned reputation for excellence in regulatory compliance was furthered this year as the utility successfully passed nine major audits without any violations. With a seven-year record of perfect reviews, GP&L is highly regarded for its compliance expertise by both auditors and other utilities, which frequently ask for consultation. GP&L employees continue to participate on many industry committees and speak at conferences as compliance and security experts.

# Regulatory

Organizational changes supported the efficiency and continued success of GP&L's regulatory and compliance efforts. Additionally, the utility operates under the GP&L Compliance Plan, which specifies employee responsibilities, data management practices, and overall procedures. While this plan is not an industry requirement, it encourages a culture of compliance, which has garnered the utility respect from auditors.



ERCOT drill

Ensuring the regulatory compliance of GP&L operations and facilities is an in-depth process that requires extensive knowledge of often-changing industry protocols and the close coordination of all divisions. Each audit requires the thorough and continuous documentation of all required information leading up to the submission of RSAWs¹ and associated documentation, and in-person meetings with auditors. GP&L's practice of performing ongoing internal reviews has enabled the utility to proactively recognize and protect against potential issues.

Several projects and activities were undertaken this year in support of regulatory compliance. GP&L's transmission and QSE operators each completed numerous hours of training to keep their certifications current. They also participated in annual compliance awareness training exercises.

To satisfy ERCOT<sup>2</sup> requirements, droop testing was conducted at the Spencer Power Plant to ensure the two generators responded appropriately to frequency deviations initiated through the control systems. For all of GP&L's generating facilities, winter and summer weatherization plans were



Substation security equipment

updated and submitted to ERCOT and TRE<sup>3</sup>. The annual Resource Asset Registration Form, or RARF, was also completed and sent to ERCOT, providing the grid operator information on the utility's production resources and the performance capabilities of each unit.

- <sup>1</sup> Reliability Standard Audit Worksheets
- <sup>2</sup> Electric Reliability Council of Texas
- <sup>3</sup> Texas Reliability Entity
- <sup>4</sup> North American Electric Reliability Corporation

#### **GP&L Audits in 2013**

- Transmission Operator NERC Reliability Standards Audit
- NERC<sup>4</sup> Critical Infrastructure Protection (CIP) Audit for The Transmission Owner, Transmission Operator, Load Serving Entity and Generation Operator functions
- NERC Generator Owner Reliability Standards Audit
- NERC Generator Owner Critical Infrastructure Protection Audit
- NERC Purchasing Selling Entity Spot-check Audit
- QSE ERCOT Protocol Audit
- Resource Entity ERCOT Protocol Audit
- TMPA Transmission Owner and Transmission Planner NERC Reliability Standards Audit
- TMPA Critical Infrastructure Protection Audit
- Participation in Denton
   Municipal Electric NERC
   Transmission Operator
   Reliability Standards Audit



In 2013, GP&L continued to provide customers with reliable electric service,

a goal achieved through upgrades and improvements to the electric system and an ongoing commitment to employee preparedness and training.

GP&L's dedication to reliability was recognized by the American Public Power Association, which designated the utility for the third time as a Reliable Public Power Provider (RP3®). GP&L advanced this year from the gold to platinum level of recognition, signifying the fulfillment of between 90 and 97 percent of the program's rigorous criteria. Nationwide, only 184 public power utilities hold an RP3 title, with only four in the state of Texas.



## Reliability

The utility supported improved reliability in the southern part of Garland with an expansion of the Rosehill Substation and the addition of three distribution feeders. The substation construction included a new 28 MVA transformer, a new 138kV bus extension, modifications to the existing 138kV bus, a new transmission breaker, and new switchgear.

Residential customers in various parts of the city benefited from the replacement of 50,000 feet of aging underground distribution cable. This was part of an ongoing effort to change out old, direct-bury cable with more durable, conduit-protected cable.

Working with a local industrial customer, the utility negotiated an easement contract to support an upgrade of the Kraft Foods Substation to a dual-feed system. This enhancement will dramatically increase reliability for both Kraft's Garland plant and GP&L's electric system serving the area.

The utility's commitment to reliability extended beyond the city, as GP&L directed the reconstruction of a 21.3-mile 138kV transmission line that runs from the Olinger Power Plant in Nevada, Texas to Greenville, Texas. The line, which is owned by TMPA, was upgraded to increase its capacity rating and includes 217 new steel structures.



Fiber optic shield wire upgrade

Nearby, the construction of another set of steel transmission structures will allow GP&L electric lines and communication fiber to pass over another utility's 138kV transmission line west of the new Nevada Switchyard.

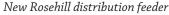
To improve SCADA communication between the Olinger Plant and System Operations, 10 miles of fiber optic shield wire were installed. This wire offers more reliability than commercially owned cable and enhances the protection of the utility's transmission lines.

GP&L's Energy Services Division carried out numerous upgrades and maintenance projects to ensure the dependability of the Olinger Plant's generation units. When Unit #3 experienced a ground fault and required an outage for a generator rewind, crews took the opportunity to perform a turbine overhaul and stator wedging on the unit.

The addition of a large water treatment unit at Olinger completed the second phase of the plant's reverse osmosis system. The new water treatment unit, along with the two that were previously in place, reduced the amount of caustic chemicals used in providing the boilers with the ultra-pure water they require. Separately, a chlorine system upgrade improved the quality of the water used by the cooling system, while also reducing long term maintenance costs.

This year, two significant control enhancements were made at Olinger to ensure reliable operation of the units. The new human machine interface control software provides operators with better graphics and functionality. The second phase of control tuning for the Unit #2 boiler provided analysis of boiler variables, such as fans and feed pumps. This information will let GP&L run the units more efficiently and reduce NOx emissions. Employees completed extensive training to master the operations of both of these new control systems.

Employee development was also a focus in the Transmission & Distribution Division. Linemen, troubleshooters, and substation and meter technicians have expanded training opportunities at an employee-designed outdoor training field, which can be reconfigured as needed. The addition of this one-acre field will also allow for the implementation of hands-on proficiency testing for apprentices.



Olinger Unit #3 outage





Chlorine system project



In 2013, GP&L kept pace with the continually advancing electric utility industry, exploring and utilizing better ways to serve customers, support employees and expand business operations.

Numerous improvements made this year increased the efficiency and profitability of GP&L's QSE & Wholesale Energy group. To provide more granularity in tracking revenues and expenses, the business processes for GP&L's local customer load and generation output were divided into separate sub-QSEs. In addition, GP&L took steps to precisely classify and account for the transactions involved with serving all QSE and wholesale customers. Within just a few months, the new processes and procedures were put into place, enhancing the transaction reconciliation process.

## Enhancements

The ongoing expansion of the utility's QSE and wholesale energy business prompted other upgrades, including the development and implementation of an application to automate daily market interactions with ERCOT. Any number of new clients can be quickly set up within this system. The utility's method of taking on these customers was also improved by establishing a

more thorough process for analyzing the credit limits of potential clients.

To fulfill contractual obligations for this external business,

GP&L amended standard form agreements with counter-parties to comply with

Dodd-Frank Act regulations.



switching orders without incident



Olinger control room



System Operations completed several projects to better operate and ensure the safety of the electric systems run by GP&L. Work processes inside the control room were enhanced by the implementation of centralized electronic logs for all operations and electronic messaging to facilitate communication between operators and others at GP&L. The division continued to place high importance on safety, creating and completing more than 460 switching orders without incident.

System
Operations
control room

Upgrades were made this year to the remote terminal units at most of the substations that GP&L operates. These improvements provide accurate data to the energy management system, allowing Technology Services personnel to monitor activity and solve problems remotely. Reliability was also strengthened at the power plants with an upgrade of the network infrastructures.

Within Transmission & Distribution, the productivity of field crews was bolstered by the installation of a new mobile computing system that better maintains consistent network connectivity for laptops and reliable remote access to live maps, manuals and software.

At the Olinger Plant, a well-trained work force contributed to increased efficiency and reduced operating costs. Following comprehensive cross training, the plant's maintenance employees worked as auxiliary operators during the summer months.

Improvements in how the utility does business are not limited to processes and technology. At times of high power demand, every energy source is important. As part of GP&L's ongoing assessment of power resources, a plan was established to use the backup generators at the City's water pumping stations as a power resource should GP&L need to shed load or locate a market for the power the generators can provide.

Mobile

Mobile computing

From electric system upgrades and construction to sponsorship of local programs, GP&L's ongoing community support and involvement continued to benefit Garland residents, neighborhoods and businesses.

## Community

To prepare for the planned widening of Northwest Highway, GP&L installed a 1.2-mile steel pole line from Centerville Road to La Prada Drive. In advance of the construction of this 52-pole line, utility representatives met with residents to explain the project and address concerns. Crews also installed a median streetlight circuit on Country Club Road from Highway 66 to Castle Drive, illuminating a previously unlit road.

With an improving economy, Garland experienced commercial and residential growth that GP&L supported with several construction projects. For example, a 600-amp feeder loop was completed in north Garland to serve the new Academy Sports + Outdoors store and any future development in the area. Streetlights and underground distribution cable were installed at the Wagon Wheel Crossings, Carriage House and Cypress Cove subdivisions.



The utility continued to promote energy conservation through the

EnergySaver Program, which provides bill credits to GP&L customers who invest in energy efficient heat pumps or air conditioning equipment, and home weatherization upgrades.

The program enjoyed a successful sixth year, with 497 applications. Since the launch of the program, more than 3,900 applications have been approved.

Large commercial customers also benefited from the EnergySaver Program.

Both Plastipak Packaging, Inc. and Baylor Medical Center at Garland were granted bill credits for energy-efficient lighting projects. GP&L also extended a bill credit to Baylor after they applied tinting to the hospital's windows, totaling 16,000 square feet of glass.



Window tinting for energy efficiency

The utility also offers free energy audits to assist customers in taking steps to improve energy efficiency; 450 home and small commercial energy audits were performed in person this year. Also in an effort to promote energy conservation, GP&L led the collaboration among the City of Garland utility departments to create the Twitter account @GoGreenGarland. Tweets from this account educate and encourage Garland residents to conserve power and water, recycle and protect the environment.

While GP&L provides electric service to most of Garland, power is supplied by retail providers to some residents and businesses, including several City-owned facilities. Before contracts expired on more than 50 accounts at these facilities, GP&L successfully negotiated favorable pricing in a 36-month electric contract, reducing the City's retail power expenditure.

In 2013, GP&L was again recognized by the Arbor Day Foundation as a Tree Line USA utility, signifying a commitment to beautifying the community through proper tree-trimming practices. GP&L's sponsorship of the annual Tree Power Free Tree Giveaway, during which 500 trees are given to Garland residents, supports this designation.



Tree Power Free Tree Giveaway



Williams

Stadium signage

GP&L's association with Garland Independent School District was expanded through the sponsorship of a new video scoreboard and other signage at the district's football stadiums. The utility continued to honor teachers through the Teacher of the Month Program, which recognizes outstanding teachers from the district's schools.

Other programs and events that GP&L supports include the Healthy Living Expo, Sweetheart Dance, Neighborhood Summit, Garland Chamber of Commerce Golf Tournament and local performing arts.

600-amp feeder loop in north Garland



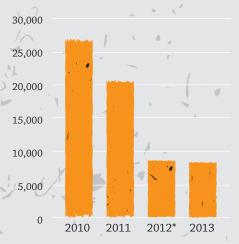
RIGHT LANE CLOSED

Feeder on Northwest Highway

## Performance indicators

Fiscal Year Ended September 30th

#### **Service Requests**

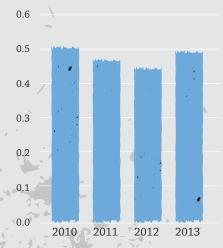


Description: Total number of annual requests for distribution and transmission services.

Interpretation: Service requests are the macro level indicator of the productivity in the Transmission & Distribution Division. Incidents such as major storms can impact the totals.

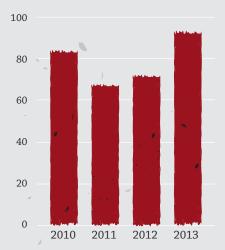
\*The significant decrease reflects the outsourcing of line locates.

#### **Debt-to-Asset Ratio**



Description: The debt-to-asset ratio is a comparison of an organization's current and accrued liabilities and long-term debt to total assets. This ratio reflects to what degree an organization finances its assets with long-term debt.

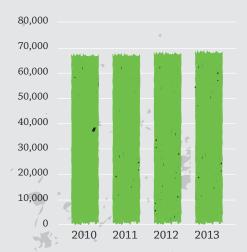
### Operating Expenditures per Megawatt Hour



Description: Total GP&L expenses (including TMPA purchases) for utility operation divided by the total kilowatt hours of sales x 1,000.

Interpretation: As this statistic is highly influenced by fuel cost, TMPA costs and debt service requirements, comparisons between utilities must be made carefully.

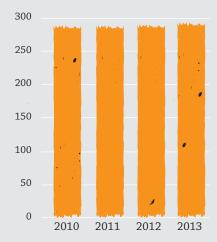
### **Electric System Number** of Retail Customers



Description: Total annual customers.

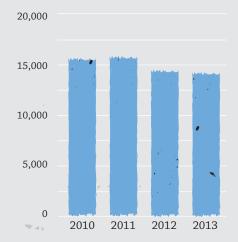


#### Retail Customers per Employee



Description: Number of retail customers divided by the number of electric utility employees.

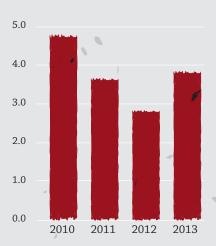
#### KWH Sales per Residential Customer



Description: Sales of electricity in kilowatt hours for the residential class customers divided by total number of residential customers.

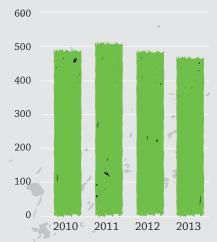
Interpretation: Changes in sales can be due to seasonal temperatures and customers' electricity utilization preferences.

#### **OSHA Incidence Rate**



Description: This is the standard indicator utilized by the industry to report lost time accidents. It is produced by multiplying the number of lost time accidents by 200,000, then dividing that number by the total hours worked by the employees.

### Electric System Peak (Megawatts)



Description: Peak demand as reported to the U.S. Department of Energy.

## Balance sheet

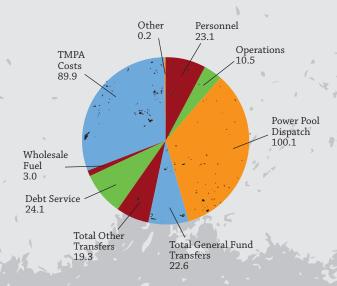
Fiscal Year Ended September 30, 2013. With comparative totals for Fiscal Year Ended September 30, 2012. (Unaudited)

ASSETS		2013		2012
Current Assets:			\	, (
Cash and investments Inventories Receivables and other	\$	47,766,293 6,150,086 63,016,100		43,856,397 4,639,850 39,552,147
Total Current Assets	,	116,932,479		88,048,394
Restricted Assets:			<b>&gt;</b>	
Cash and investments		199,820,376		213,450,827
Accrued interest receivable	J	235,683		196,590
Total Restricted Assets		200,056,059		213,647,417
Property, Plant and Equipment -				
Net of accumulated depreciation		344,508,315	1	270,661,638
Other Assets		121,417,431		128,185,697
Total Assets	\$	782,914,284	\$	700,543,146

Audited financial statements providing greater detail can be obtained from the City of Garland Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2013. The CAFR report is located on the City of Garland website at www.garlandtx.gov/gov/eg/finance/compfinanreport.asp

#### Fiscal Year 2013 Total Expenditures

in millions of dollars



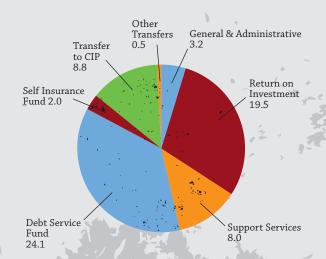


LIABILITIES		2013	'\	2012	
Current Liabilities:			,	, (	
From current assets payables	\$	31,890,618		35,813,966	
Long-term Liabilities:					
From restricted assets		_			
Accounts payable		14,554,587		1,218,386	
Retainage payable		• -		14,160	
Total payables from restricted assets		14,554,587	<b>&gt;</b>	1,232,546	
Bonds payable and other	4	342,461,681		275,370,826	
Total Long-term Liabilities		357,016,268		276,603,372	
Total Liabilities		388,906,886		312,417,338	
EQUITY			,		
Retained Earnings:					
Invested in capital assets, net of debt	2	209,648,278		121,533,515	
Restricted		175,112,661		193,962,533	
Unrestricted		9,246,459		72,629,760	
Total Retained Earnings		394,007,398		388,125,808	4
Total Liabilities, Contributed					
Capital and Retained Earnings	\$	782,914,284	\$	700,543,146	

#### Fiscal Year 2013 Transfers to Other Funds

-

in millions of dollars

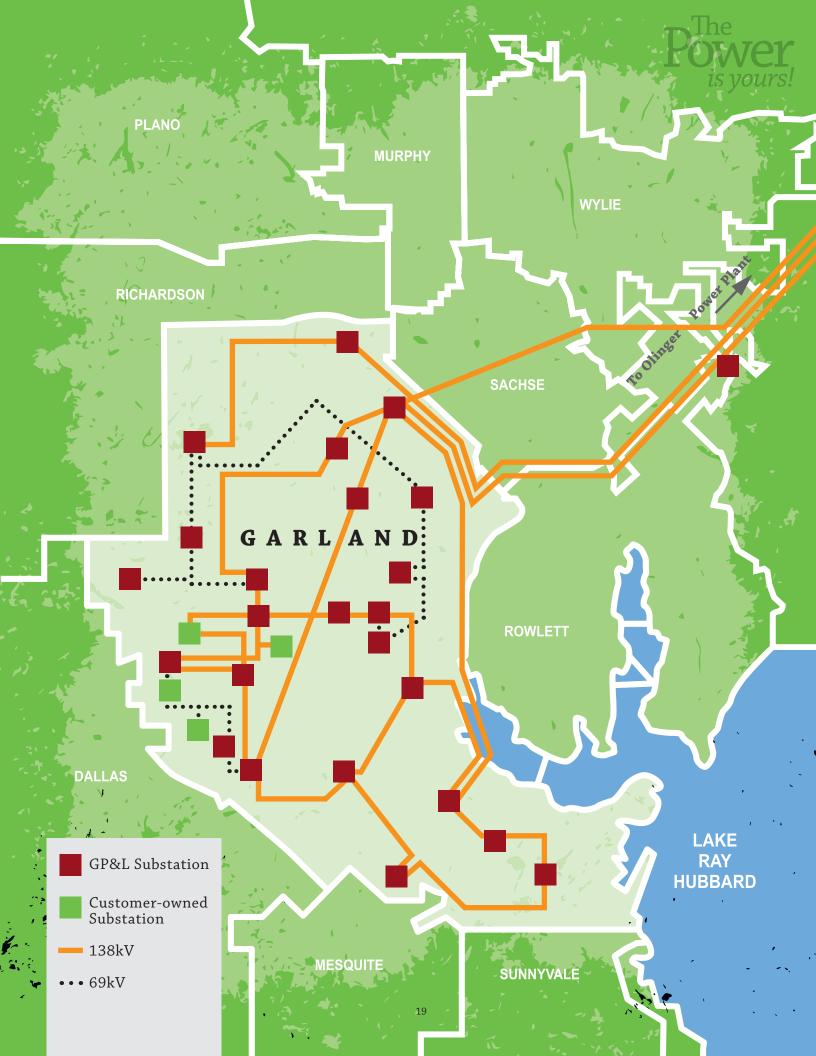


## Statement of revenues, expenses and changes in retained earnings

Fiscal Year Ended September 30, 2013. With comparative totals for Fiscal Year Ended September 30, 2012. (Unaudited)

Operating revenues:		2013		2012	
	<i>t</i>	DOC 000 F70		000 000 007	
Charges for service	\$	296,866,570		222,228,397	
Other		891,631		1,472,387	
Total Operating Revenues		297,758,201		223,700,784	
Operating expenses			<b>&gt;</b>		
before depreciation:					
before depreciation.	4				
Fuel purchases/Demand charges		192,990,574		82,829,698	
Operating expenses		36,759,798		40,435,003	
General and administrative		11,421,559		10,674,684	4
Total Operating Expenses					
Before Depreciation		241,171,931		133,939,385	
1					
Operating income before depreciation		56,586,270		89,761,399	
Depreciation and Amortization expense		18,931,074		19,481,133	
, ,					0
Operating Income		37,655,196		70,280,266	
Non-operating revenues				4	
(expenses):					
Return on investment		(19,451,298)		(19,451,298)	
Earnings on investments		(30,072)		1,393,215	
Interest expense		(10,249,362)		(10,739,376)	
Other		(1,076,570)		(1,464,313)	
Net transfers		(966,304)	1	(732,995)	
Net Non-operating Revenue (expense)		(31,773,606)	*	(30,994,767)	
Net Income		5,881,590		39,285,499	
Retained Earnings at Beginning of Year		388,125,808		348,840,309	
netained barnings at Deginning of Tear		550,125,000		<u>540,040,303</u>	
Retained Earnings at End of Year	\$	394,007,398	\$	388,125,808	
The second secon	Ψ	=======================================	Ψ.	=====	

Audited financial statements providing greater detail can be obtained from the City of Garland Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2013. The CAFR report is located on the City of Garland website at www.garlandtx.gov/gov/eg/finance/compfinanreport.asp



## Key statistics

#### System Average Interruption Duration Index (SAIDI)

Fiscal Year Ended September 30th



System Average Interruption Duration Index (SAIDI) - Designed to give information about the average time that the customers are interrupted. This index is commonly referred to as Customer Minutes of Interruption or Customer Hours. It is a measure of the response time or restoration time when outages occur and is computed by dividing the sum of all customer interruption durations by the total number of customers served.

### System Average Interruption Frequency Index (SAIFI)

Fiscal Year Ended September 30th



System Average Interruption Frequency Index (SAIFI) - This is defined as the average number of times that a customer is interrupted during a specified time period. It is determined by dividing the total number of customers interrupted in a time period by the average number of customers served. The resulting unit is "interruptions per customer."

#### 2013 Transmission & Distribution Statistics

Distribution lines 3.5 miles of overhead added or replaced 19.8 miles of underground added or replaced Distribution poles added or replaced Overhead operations & repairs 175 Overhead construction projects 460 Underground operations & repairs 343 Underground construction projects Street lights 1,450 operations & repairs 167 construction projects Residential meter sets & changeouts Commercial meter sets & changeouts 162 1,435 Meter operations, repairs & testing 2,752 Trouble calls Tree trimming requests





#### **Garland City Council**

Standing (left to right)

B.J. Williams – District 4

Scott LeMay - District 7

Stephen W. Stanley – District 3

John Willis - District 5

Jim Cahill – District 8

Tim Campbell - District 1

Seated (left to right)

Lori Barnett Dodson - District 6

Mayor Pro Tem

Douglas Athas - Mayor

Anita Goebel - District 2

#### **Utility Services Committee**

Lori Barnett Dodson, Chair

Jim Cahill

John Willis



**City Manager**William E. Dollar

Editors: Elizabeth Kimbrough, Julie Bird

Design: Mark Gates



Garland Power & Light
P.O. Box 469002
Garland, Texas 75046-9002
972-205-2650
gpltexas.org